WHAT IS CLAIMED IS:

1   1.   A method for storing data in a storage medium, comprising:

2   providing a layout of the storage medium including a first and second user

3   data sections, wherein the first user data section comprises a faster access storage

4   space than the second user data section;

5   determining a first set of data to be accessed at a faster rate than a second set

6   of data;

7   writing the first set of data to the first user data section; and

8   writing the second set of data to the second user data section.

1   2.   The method of claim 1, wherein data is written to the second user data

2   section after the first user data section is filled with data.

1   3.   The method of claim 1, wherein the storage medium comprises

2   magnetic tape, and wherein the first and second user data sections are comprised of .

3   separate wrap sections on the tape.

1   4.   The method of claim 1, wherein the storage medium comprises a

2   magnetic tape medium, and wherein the first user data section has a shorter

3   longitudinal length than the second user data section.

1   5.   The method of claim 1, wherein the magnetic tape medium is

         implemented using Linear Tape Open (LTO) technology.

1   6.   The method of claim 1, wherein the storage medium comprises

2   magnetic tape and wherein data is written in separate serpentine patterns within the

3   first and second user data sections.

1   7.   The method of claim 6, wherein data is written in a serpentine pattern

2   in n wrap sections between a beginning point and end point of the first user data

3   section and in n wrap sections between a beginning point and end point of the second

4   user data section, whereby there are a total of $2*n$ wrap sections in the first and

5   second user data sections.

1   8.   The method of claim 7, wherein writing the data to wrap sections

2   between the beginning and end points of the first and second user data sections further

3   comprises:

4   writing in the serpentine pattern data to a first through $(n - 1)$ wrap sections

5   between the beginning and end points in the first user data section; and

6   writing in the serpentine pattern data to an n through $(2*n - 1)$ wrap sections

7   between the beginning and end points in the second user data section.

1   9.   The method of claim 8, further comprising:

2   writing data to wrap section $2*n$ from the end to the beginning points of the

3   first user data section.

1   10.   The method of claim 7, wherein writing the data to wrap sections

2   between the beginning and end points of the first and second user data sections further

3   comprises:

4   writing in the serpentine pattern data to a first through n wrap sections

5   between the beginning and end points in the first user data section; and

6   writing in the serpentine pattern data to an $(n + 1)$ through $(2*n)$ wrap sections

7   between the beginning and end points in the second user data section.

1   11.   The method of claim 6, wherein the first user data section is located

2   closer to a beginning of the tape medium than the second user data section.

1   12.   The method of claim 11, wherein data in a non-volatile memory in a

2   cartridge including the magnetic tape medium indicates beginning and end

1   longitudinal positions on the tape medium of the first and second user data sections.

1   13.   The method of claim 1, wherein the storage medium comprises a

2   magnetic tape, wherein data within each user data section is stored in a consecutive

3   wrap section, which comprises a section of the wrap extending the length of the tapes

4   track groups, further comprising:

5   receiving a request to access a new position on the storage medium;

6   determining one wrap section in one of the first or second user data sections

7   including the requested new position; and

8   accessing the requested new position in the determined wrap section in one of

9   the first or second user data sections.

1   14.   The method of claim 1, wherein there are additional user data sections

2   in the storage medium.

1   15.   A method for storing data records on a magnetic tape medium,

2   comprising:

3   selecting a first set of data records to write to a first user data section of the

4   magnetic tape medium, wherein the magnetic tape medium further includes a second

5   user data section, and wherein the first user data section comprises a faster access user

6   data section than the second user data section;

7   transferring the first set of data records to write to the magnetic tape medium

8   wherein the first set of data records are written to the first user data section; and

9   transferring the second set of user data records to write to the magnetic tape

10   medium after writing the first set of data records, wherein the second set of data

11   records are written to one of the first user data section or second user data section of

12   the magnetic tape medium.

1   16.   The method of claim 15, wherein before writing the second set of data

2   records to the magnetic tape medium, filling the first user data section with data.
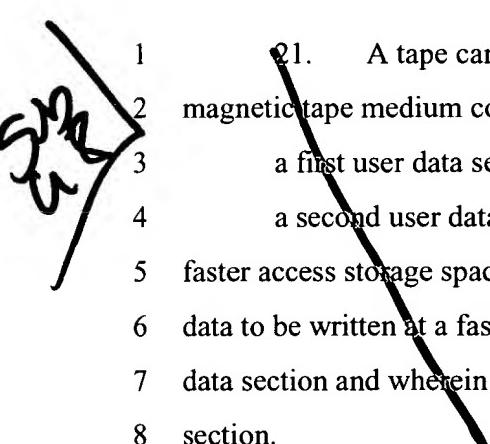
1   17.   The method of claim15, wherein the first user data section has a

2   shorter longitudinal length than the second user data section.

1   18.   The method of claim 15, wherein data is written in separate serpentine

2   patterns within the first and second user data sections.

1   19.   The method of claim 18, wherein the first user data section is located

2   closer to a beginning of the tape medium than the second user data section.

1   20.   The method of claim 15, wherein the first set of data records comprises

2   previews of a multimedia files and wherein the second set of data records comprises

3   the full multimedia files for which previews are included in the first set of data

4   records.

1   21.   A tape cartridge including a magnetic tape medium, wherein the

2   magnetic tape medium comprises:

3   a first user data section; and

4   a second user data sections, wherein the first user data section comprises a

5   faster access storage space than the second user data section, wherein a first set of

6   data to be written at a faster rate than a second set of data is written to the first user

7   data section and wherein the second set of data is written to the second user data

8   section.

1   22.   The tape cartridge of claim 21, wherein the first user data section has a

2   shorter longitudinal length than the second user data section.

1   23.   The tape cartridge of claim 21, wherein data is written in separate

2   serpentine patterns within the first and second user data sections.

1   24.   The tape cartridge of claim 23, wherein the first user data section is

2   located closer to a beginning of the tape medium than the second user data section.

1   25.   The tape cartridge of claim 21, wherein the magnetic tape medium is

2   implemented using Linear Tape Open (LTO) technology.

1   26.   The tape cartridge of claim 21, wherein there are additional user data

2   sections in the storage medium.

1   27.   A system for storing data, comprising:

2   a storage medium;

3   means for providing a layout of the storage medium including a first and

4   second user data sections, wherein the first user data section comprises a faster access

5   storage space than the second user data section;

6   means for determining a first set of data to be accessed at a faster write than a

7   second set of data; and

8   means for writing the first set of data to the first user data section and for

9   writing the second set of data to the second user data section.

1   28.   The system of claim 27, wherein the means for writing writes data to

2   the second user data section after the first user data section is filled with data.

1   29.   The system of claim 27, wherein the storage medium comprises

2   magnetic tape, and wherein the first and second user data sections are comprised of

3   separate wrap sections on the tape.

1   30.   The system of claim 27, wherein the storage medium comprises a

2   magnetic tape medium, and wherein the first user data section has a shorter

3   longitudinal length than the second user data section.

1   31.   The system of claim 27, wherein the magnetic tape medium is

implemented using Linear Tape Open (LTO) technology.

1   32.   The system of claim 27, wherein the storage medium comprises

2   magnetic tape and wherein data is written in separate serpentine patterns within the

3   first and second user data sections.

1   33.   The system of claim 32, wherein the means for writing the first and

2   second sets of data further performs:

3   writing data in a serpentine pattern in n wrap sections between a beginning

4   point and end point of the first user data section and in n wrap sections between a

5   beginning point and end point of the second user data section, whereby there are a

6   total of $2*n$ wrap sections in the first and second user data sections.

1   34.   The system of claim 33, wherein the means for writing the first and

2   second sets of data further performs:

3   writing in the serpentine pattern data to a first through $(n - 1)$ wrap sections

4   between the beginning and end points in the first user data section; and

5   writing in the serpentine pattern data to an n through $(2*n - 1)$ wrap sections

6   between the beginning and end points in the second user data section.

1   35.   The system of claim 35, wherein the means for writing the first and

2 second sets of data further performs:

3   writing data to wrap section $2*n$ from the end to the beginning points of the

4 first user data section.

1   36.   The system of claim 33, wherein the means for writing the first and

2 second sets of data further performs:

3   writing in the serpentine pattern data to a first through n wrap sections

4 between the beginning and end points in the first user data section; and

5   writing in the serpentine pattern data to an $(n + 1)$ through $(2*n)$ wrap sections

6 between the beginning and end points in the second user data section.

1   37.   The system of claim 32, wherein the first user data section is located

2 closer to a beginning of the tape medium than the second user data section.

1   38.   The system of claim 37, wherein data in a non-volatile memory in a

2 cartridge including the magnetic tape medium indicates beginning and end

1 longitudinal positions on the tape medium of the first and second user data sections.

1   39.   The system of claim 27, wherein the storage medium comprises a

2 magnetic tape, wherein data within each user data section is stored in a consecutive

3 wrap section, which comprises a section of the wrap extending the length of the tapes

4 track groups, further comprising:

5   means for receiving a request to access a new position on the storage medium;

6   means for determining one wrap section in one of the first or second user data

7 sections including the requested new position; and

8   means for accessing the requested new position in the determined wrap

9 section in one of the first or second user data sections.

1   40.   The system of claim 27, wherein there are additional user data sections

2   in the storage medium.

1   41.   A system for storing data records;

2   a magnetic tape medium;

3   means for selecting a first set of data records to write to a first user data

4   section of the magnetic tape medium, wherein the magnetic tape medium further

5   includes a second user data section, and wherein the first user data section comprises

6   a faster access user data section than the second user data section;

7   means for transferring the first set of data records to write to the magnetic tape

8   medium wherein the first set of data records are written to the first user data section

9   and for transferring the second set of user data records to write to the magnetic tape

10   medium after writing the first set of data records, wherein the second set of data

11   records are written to one of the first user data section or second user data section of

12   the magnetic tape medium.

1   42.   The system of claim 41, wherein before writing the second set of data

2   records to the magnetic tape medium, filling the first user data section with data.

1   43.   The system of claim 41, wherein the first user data section has a

2   shorter longitudinal length than the second user data section.

1   44.   The system of claim 41, wherein data is written in separate serpentine

2   patterns within the first and second user data sections.

1   45.   The system of claim 44, wherein the first user data section is located

2   closer to a beginning of the tape medium than the second user data section.

1   46.   The system of claim 41, wherein the first set of data records comprises

2   previews of a multimedia files and wherein the second set of data records comprises

3   the full multimedia files for which previews are included in the first set of data

4   records.

1   47.   An article of manufacture including code for storing data in a storage

2   medium by:

3   providing a layout of the storage medium including a first and second user

4   data sections, wherein the first user data section comprises a faster access storage

5   space than the second user data section;

6   determining a first set of data to be accessed at a faster write than a second set

7   of data;

8   writing the first set of data to the first user data section; and

9   writing the second set of data to the second user data section.

1   48.   The article of manufacture of claim 47, wherein data is written to the

2   second user data section after the first user data section is filled with data.

1   49.   The article of manufacture of claim 47, wherein the storage medium

2   comprises magnetic tape, and wherein the first and second user data sections are

3   comprised of separate wrap sections on the tape.

1   50.   The article of manufacture of claim 47, wherein the storage medium

2   comprises a magnetic tape medium, and wherein the first user data section has a

3   shorter longitudinal length than the second user data section.

1   51.   The article of manufacture of claim 47, wherein the magnetic tape

medium is implemented using Linear Tape Open (LTO) technology.

1   52.   The article of manufacture of claim 47, wherein the storage medium

2   comprises magnetic tape and wherein data is written in separate serpentine patterns

3   within the first and second user data sections.

1   53.   The article of manufacture of claim 52, wherein data is written in a

2   serpentine pattern in n wrap sections between a beginning point and end point of the

3   first user data section and in n wrap sections between a beginning point and end point

4   of the second user data section, whereby there are a total of $2*n$ wrap sections in the

5   first and second user data sections.

1   54.   The article of manufacture of claim 53, wherein writing the data to

2   wrap sections between the beginning and end points of the first and second user data

3   sections further comprises:

4   writing in the serpentine pattern data to a first through $(n - 1)$ wrap sections

5   between the beginning and end points in the first user data section; and

6   writing in the serpentine pattern data to an n through $(2*n - 1)$ wrap sections

7   between the beginning and end points in the second user data section.

1   55.   The article of manufacture of claim 54, further comprising:

2   writing data to wrap section $2*n$ from the end to the beginning points of the

3   first user data section.

1   56.   The article of manufacture of claim 53, wherein writing the data to

2   wrap sections between the beginning and end points of the first and second user data

3   sections further comprises:

4   writing in the serpentine pattern data to a first through n wrap sections

5   between the beginning and end points in the first user data section; and

6   writing in the serpentine pattern data to an $(n + 1)$ through $(2*n)$ wrap sections

7   between the beginning and end points in the second user data section.

1   57.   The article of manufacture of claim 52, wherein the first user data

2   section is located closer to a beginning of the tape medium than the second user data

3   section.

1   58.   The article of manufacture of claim 57, wherein data in a non-volatile

2   memory in a cartridge including the magnetic tape medium indicates beginning and

3   end longitudinal positions on the tape medium of the first and second user data

1   sections.

1   59.   The article of manufacture of claim 47, wherein the storage medium

2   comprises a magnetic tape, wherein data within each user data section is stored in a

3   consecutive wrap section, which comprises a section of the wrap extending the length

4   of the tapes track groups, further comprising:

5   receiving a request to access a new position on the storage medium;

6   determining one wrap section in one of the first or second user data sections

7   including the requested new position; and

8   accessing the requested new position in the determined wrap section in one of

9   the first or second user data sections.

1   60.   The article of manufacture of claim 47, wherein there are additional

2   user data sections in the storage medium.

1   61.   An article of manufacture for storing data records on a magnetic tape

2   medium by:

3   selecting a first set of data records to write to a first user data section of the

4   magnetic tape medium, wherein the magnetic tape medium further includes a second

5   user data section, and wherein the first user data section comprises a faster access user

6   data section than the second user data section;

7   transferring the first set of data records to write to the magnetic tape medium

8   wherein the first set of data records are written to the first user data section; and

9   transferring the second set of user data records to write to the magnetic tape

10   medium after writing the first set of data records, wherein the second set of data

11   records are written to one of the first user data section or second user data section of

12   the magnetic tape medium.

1   62.   The article of manufacture of claim 61, wherein before writing the

2   second set of data records to the magnetic tape medium, filling the first user data

3   section with data.

1   63.   The article of manufacture of claim 61, wherein the first user data

2   section has a shorter longitudinal length than the second user data section.

1   64.   The article of manufacture of claim 61, wherein data is written in

2   separate serpentine patterns within the first and second user data sections.

1   65.   The article of manufacture of claim 64, wherein the first user data

2   section is located closer to a beginning of the tape medium than the second user data

3   section.

1   66.   The article of manufacture of claim 61, wherein the first set of data

2   records comprises previews of a multimedia files and wherein the second set of data

3   records comprises the full multimedia files for which previews are included in the

4   first set of data records.